

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-68. (Cancelled)

69. (Currently amended) A method of treating prostate cancer comprising:
providing an antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to prostate-specific membrane antigen (PSMA) PSMA with a monoclonal antibody selected from the group consisting of ~~an E99, a J415, a J533, and a J591 monoclonal antibody~~ a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126; and
administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

70. (Previously presented) The method according to claim 69, wherein the prostate cancer is metastatic prostate cancer.

71. (Previously presented) The method according to claim 70, wherein the metastatic prostate cancer involves a bone marrow or a lymph node metastasis.

72. (Previously presented) The method according to claim 69, wherein the administering is carried out parenterally.

73. (Previously presented) The method according to claim 69, wherein the administering is carried out intravenously.

74. (Previously presented) The method according to claim 69, wherein the administering is carried out by intracavitary instillation.

75. (Cancelled)

76. (Previously presented) The method according to claim 69, wherein the antibody or antigen binding portion thereof is administered following a prostatectomy.

77. (Previously presented) The method according to claim 69, wherein the antibody or antigen binding portion binds live cells.

78. (Previously presented) The method according to claim 69, wherein the antibody is selected from the group consisting of a monoclonal antibody and a polyclonal antibody.

79. (Currently amended) The method according to claim 78, wherein the antibody is a monoclonal antibody selected from the group consisting of ~~an E99, a J415, a J533, and a J591 monoclonal antibody~~ a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126.

80-123. (Cancelled)

124. (Currently amended) A method of treating prostate cancer comprising:

providing an antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate-specific-membrane-antigen PSMA~~ with a monoclonal antibody selected from the group consisting of ~~an E99, a J415, a J533, and a J591 monoclonal antibody~~ a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is labeled with the radiolabel ⁹⁰Y;
and

administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

125. (Currently amended) A method of treating prostate cancer comprising:

providing an antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to ~~prostate-specific-membrane-antigen PSMA~~ with a monoclonal antibody selected from the group consisting of ~~an E99, a J415, a J533, and a J591 monoclonal antibody~~ a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is labeled with a radiolabel, and wherein the radiolabel is a beta- or gamma-emitter; and

administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

126. (Currently amended) A method of treating prostate cancer comprising:

providing an antibody or antigen binding portion thereof which binds to prostate specific

membrane antigen (PSMA) and competes for binding to prostate-specific membrane antigen PSMA with a monoclonal antibody selected from the group consisting of an E99, a J415, a J533, and a J591 monoclonal antibody a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is bound to a cytotoxic drug of bacterial origin; and

administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

127. (Currently amended) A method of treating prostate cancer comprising:

providing an antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to prostate-specific membrane antigen PSMA with a monoclonal antibody selected from the group consisting of an E99, a J415, a J533, and a J591 monoclonal antibody a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is bound to a cytotoxic drug of plant origin; and

administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

128. (Cancelled)

129. (Currently amended) The method according to claim 69, wherein the antibody or antigen binding portion thereof competes for binding to ~~prostate-specific membrane antigen~~

PSMA with the J591 monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126.

130. (Currently amended) A method according to claim 69, wherein the antibody or antigen binding portion thereof competes for binding to ~~prostate-specific membrane antigen~~ PSMA with the J415 monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109.

131-136. (Cancelled)

137. (Currently amended) The method according to claim 69, 125, 126 or 127, wherein the antibody or antigen binding portion thereof is internalized with the ~~prostate-specific membrane antigen~~ PSMA.

138. (Previously presented) The method according to claim 69, 125, 126 or 127, wherein the antigen binding portion is selected from the group consisting of a Fab fragment, a F(ab')₂ fragment, and a Fv fragment.

139. (Previously presented) The method according to claim 69, wherein the antibody or antigen binding portion thereof comprises a cytotoxic drug.

140. (Previously presented) The method according to claim 139, wherein the cytotoxic drug is selected from the group consisting of a therapeutic drug, a compound emitting radiation, a molecule of plant, fungal, or bacterial origin, a biological protein, and a mixture thereof.

141. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a compound emitting radiation.

142. (Previously presented) The method according to claim 141, wherein the compound

emitting radiation is an alpha-emitter.

143. (Previously presented) The method according to claim 142, wherein the alpha-emitter is selected from the group consisting of ^{212}Bi , ^{213}Bi , and ^{211}At .

144. (Previously presented) The method according to claim 141, wherein the compound emitting radiation is a beta-emitter.

145. (Previously presented) The method according to claim 144, wherein the beta-emitter is ^{186}Re .

146. (Previously presented) The method according to claim 144, wherein the beta-emitter is ^{90}Y .

147. (Previously presented) The method according to claim 141, wherein the compound emitting radiation is a gamma-emitter.

148. (Previously presented) The method according to claim 147, wherein the gamma-emitter is ^{131}I .

149. (Cancelled)

150. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a molecule of bacterial origin.

151. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a molecule of plant origin.

152. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a biological protein.

153. (Previously presented) The method according to claim 69, wherein the antibody or antigen binding portion thereof further comprises a label.

154. (Previously presented) The method according to claim 153, wherein the label is selected from the group consisting of a biologically-active enzyme label, and a radiolabel.

155. (Previously presented) The method according to claim 154, wherein the label is a radiolabel selected from the group consisting of ^{111}In , $^{99\text{m}}\text{Tc}$, ^{32}P , ^{125}I , ^{131}I , ^{14}C , ^3H and ^{188}Rh .

156. (Currently amended) The method according to claim 69, 125, 126 or 127, wherein the antibody or antigen binding portion thereof is effective to initiate an endogenous host immune function that is therapeutically effective against prostate cancer.

157. (Previously presented) The method according to claim 156, wherein the endogenous host immune function is complement-mediated cellular cytotoxicity.

158. (Previously presented) The method according to claim 156, wherein the endogenous host immune function is antibody-dependent cellular cytotoxicity.

159. (Previously presented) The method according to claim 69, 125, 126 or 127, wherein the antibody or antigen binding portion thereof is in a composition further comprising a pharmaceutically acceptable carrier, excipient, or stabilizer.

160. (Previously presented) The method according to claim 69, 125, 126 or 127 wherein the antibody or antigen binding portion thereof is administered in conjunction with a second

therapeutic modality.

161. (Previously presented) The method according to claim 160, wherein the second therapeutic modality is selected from the group consisting of surgery, radiation, chemotherapy, immunotherapy and hormone replacement.

162. (Previously presented) The method according to claim 161, wherein the hormone replacement comprises treatment with estrogen or an anti-androgen agent.

163. (Previously presented) The method according to claim 162, wherein the anti-androgen agent is an agent which blocks or inhibits the effects of testosterone.

164. (Previously presented) The method according to claim 126, wherein the prostate cancer is metastatic prostate cancer.

165. (Previously presented) The method according to claim 164, wherein the metastatic prostate cancer involves a bone marrow or a lymph node metastasis.

166. (Previously presented) The method according to claim 126, wherein the administering is carried out parenterally.

167. (Previously presented) The method according to claim 126, wherein the administering is carried out intravenously.

168. (Previously presented) The method according to claim 126, wherein the administering is carried out by intracavitary instillation.

169. (Cancelled)

170. (Previously presented) The method according to claim 126, wherein the antibody or antigen binding portion thereof is administered following a prostatectomy.

171. (Previously presented) The method according to claim 126, wherein the antibody or antigen binding portion binds live cells.

172. (Currently amended) The method according to claim 126, wherein the antibody is a monoclonal antibody selected from the group consisting of ~~an E99, a J415, a J533, and a J591 monoclonal antibody~~ a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126.

173-185. (Cancelled)

186. (Currently amended) The method according to claim 126, wherein the antibody or antigen binding portion thereof competes for binding to ~~prostate specific membrane antigen~~ PSMA with the ~~J591~~ monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126.

187 -189. (Cancelled)

190. (Currently amended) The method according to claim 69, 124, 125, 126, or 127, wherein the method of treating prostate cancer is a method that prevents the progression of prostate cancer or delays the progression of prostate cancer.